

Publication office at Bartow, Florida. Executive and Editorial offices: 312-313 Wallace S. Bldg., Tampa, Florida. Entered as second class matter February 16th, 1920, at the post office at Tampa, Florida, under the act of March 3, 1879. Entered as second class matter June 18, 1933, at the post office at Bartow, Florida, under the act of March 3, 1879.

The Outlook For The Citrus Industry Under Government Control

By I. A. Yarnell, President Control Committee

at the Scenic Highlands Business Conference, Babson Park, Florida, February 28, 1934

So much has been said and so much has been written, the past two years in particular regarding the grave difficulties of the citrus industry, that but little foundation need be laid for the address to be made this morning on "The Outlook for the Citrus Industry Under Government Control."

I think everybody in any way connected with the industry has reached two very definite conclusions,—

First, that it is an utter impossibility for the shippers and growers to voluntarily get together, unaided and undirected by some outside authoritative power.

Time and again this has been tried through various setups, gentlemen's agreements, and what not, but invariably these efforts have failed utterly to produce any concerted or sustained action that would in any permanent sense solve the difficulties of the grower.

It simply is impossible to get the 16,000, or more growers, and the more than 275 recognized shippers of Florida, to agree on the solution of any of the several major questions which must be solved before the industry can be placed on a firm footing.

The first producing areas of Florida are too many and too far apart, and the problems of the different areas vary so greatly from the problems of other areas, that it is not possible to get voluntary cooperation among so many different interests.

That much has been learned through bitter experience, and the growers of Florida are now confronted with grave disaster unless something is done and done quickly.

These facts admitted—and we can safely say that they are—we come to the second conclusion which we can believe the great majority of growers now fully accept.

It is this—voluntary cooperation, being out of the question, growers have but one avenue of escape from continued failure—Government Control, or better still, as it is now being worked out, Government ASSIST-ANCE, to that end.

Happily this has been made possible through that great Governmental Department, the U.S. Department of Agriculture.

The Agricultural Adjustment Act
— or the A. A. A. — provides the
special department under which such
industries as ours may newly organize and submit themselves to compulsory cooperation.

That is where we find ourselves today.

You all know something of the efforts made over a period of months

to get a Shipper's Agreement, which is frequently, but incorrectly, referred to as a "Citrus Code", that was acceptable alike to the industry and the Department in Washington.

I want to say a word about this preliminary work that was done in Washington and the long delay encountered in getting an Agreement acceptable to the Department.

It did take a long time. The delay was heartbreaking.

But a lot of unjust criticism has been directed against the Department, mainly by those who know nothing of the many problems encountered in working out an Agreement.

At the public hearing held in Washington, in September, California was present with two actve delegates and possbly half a dozen inactive. Texas had one spokesman and maybe two or three others.

Florida came to the front with a large delegation from all ranks of the industry which before the session was over participated fully in the meeting. Speeches were permitted and speeches were made—plenty of them.

We brought all of Florida's accumulated troubles and problems and dumped them on the table for Washington to look over and sort out.

(Continued on page 20)

1, cuturo fruit, markeline

Wallace Can Save Citrus Through f. o. b.

By Arthur M. Duke, in Orlando Sentinel

"Price Arrival" Method, Invented Out In California, Has Florida Industry Run Down At Heels And Gasping For Breath As Auction Sales Wreck Many Other Small Markets. . . .

Can the practice of making sales "f. o. b. shipping point" be restored to the citrus industry of Florida.

Is it advisable that it be done?

The first question seems a bit complex.

To the second question there comes a chorus of affirmative answers from the growers, so that it seems to be practically unanimous.

Many latter-day growers, among whom Rex Beach prominently may be mentioned, after considerable study of the industry's problems are demanding that steps be taken to restore f. o. b. selling. Inquiry among the old-time growers reveals emphatic opinion that the citrus producers would profit largely could the practice of selling f. o. b. Florida be re-

To all intents and purposes grower sentiment favors it unanimously

How F. O. B. Works Out

A sale f. o. b. (free on board) means a sale of an agreed-in-advance price, with the responsibility of the Florida shipper ending when the packed fruit is placed aboard the car in which it is to travel and the bill of lading therefor has been signed by agent for the common carrier to which it is turned over for transporta-

Draft for the amount of the sale must be paid by the receiver before it is possible to obtain possession of the fruit at destination. Delays and other hazards of transportation are assumed by the buyer. Contrasted with other accepted methods of selling, the advantages of f. o. b. sales to the shipper are obvious.

The great bulk of the Florida Citrus Crop at times past thus was sold upon an f. o. b. basis. Considering the almost unanimous sentiment of the growers in favor of returning to that method of selling it seems to be a question of whether or not it is within the power of all concerned to bring it about.

What are some of the present obstacles to making f. o. b. sales? What is responsible for the decline of the practice until today only a very small

sold f. o. b.?

Men well posted in the industry concede that the four great obstacles

Too high minimum loads now specified by the railroads.

2. Too free sale of citrus fruits in the large auction markets.

3. Too free indulgence by some shippers in the practice of rolling cars of fruit from the packing houses to be sold on basis of "price on arrival" at destinations where the fruit may, or may not, be in actual demand when it arrives; and,

4. The PAC (perishable agricultural commodities act) by a recent congress, which is enforced by the U. S. department of agriculture.

These things they say, are responsible for the decline in the practice of f. o. b. selling.

Changing Minimum Load

The first of these is easy to understand. Before the World war Florida obtained the benefit of carload freight rates upon citrus fruits when cars were loaded with a minimum of 300 boxes. By 1917-28 it had become the general practice to load 360 boxes per car, that quantity making a load which traveled well, but there remained always the privilege of shipping carloads of only 300 boxes to towns which could handle only 300 boxes to advantage, but could not handle the larger load advantageous-

When the carload minimum was advanced by action of the rail lines to 360 boxes it became necessary for the dealers in the smaller towns to draw their supplies from larger centers instead of buying direct from Florida. When the minimum went up further to 384 boxes the number of towns unable to do business direct with Florida further was increased.

Today, when advantage may be taken of the "reduced emergency freight rates" it is required that 444 boxes constitute a carload.

This means that the earnings of the rail lines per carload are increased, but it likewise means that a vast number of towns which might handle cars of 300 boxes, being wholly unable to

percentage of Florida fruit is being dispose of 444 boxes in their trading areas, now draw their supplies from larger centers; and have wholly ceased to deal directly with Florida.

Too free selling of Florida fruit in the big markets, where the fruit must be sold in the daily auctions conducted there, is, in the opinion of well-posted growers, due to three factors.

The first of these is the demand upon the auctions for fruit by smaller towns which formerly bought direct.

The second is the vast quantities of fruit which during the last two or three seasons have gone forward from Florida by coastwise steamship rather than by rail, in order to obtain advantage of the lower boat freights.

This has been responsible for putting tremendous tonnage of Florida citrus fruits into the great auction markets of New York, Boston and Philadelphia-more fruit by far than should have gone into these markets, in the opinion of older growers, particularly in the instance of New York.

The third factor responsible for too much Florida fruit being sold in the big auction markets is one which many growers are inclined to stress. They allege it to be a simple failure by many Florida shippers to use any real salesmanship in their efforts to dispose of the portions of the Florida crop they are responsible for hand-

It is so easy, claim these growers, to simply roll a grower's fruit into an auction market and sell it there, collecting a charge for packing and selling regardless of what the fruit nets the grower, that certain shippers have completely forgotten, if ever they knew how, to exercise any salesmanship in making sales.

Whatever may be responsible for too much Florida fruit being sold in the big auctions, it is a generally accepted fact that too much thus is being sold. Shippers are willing to join growers in conceding this to be a fact. The disaster following is two-

New York Prices Rule

Firstly, prices are depressed unduly in the markets of sale by offerings right along of fruit in excess of the market demands. Secondly, printed price currents covering sales in the larger auction are daily circulated to the fruit trade over most of the United States, and furnish the buying guide for an army of buyers who do not draw their supplies direct from those markets. New York prices in particular set a level for a very large part of the country.

New York fruit prices are in the eyes of the fruit trade an index of current values no less than New York Stock Exchange prices are to the stock and bond buyers over the country. Thus wholly depressed prices on fruit in New York depress the fruit markets of the country, large and small

Can The Control Board Solve It?

It seems conceded everywhere that during the past two or three seasons vastly more fruit has been shipped to, and sold in, the auction market of New York than was called for by the demand there, and that to slightly less extent this was true of all the other large centers where the auction method of selling prevails.

The recent prorate order of the Florida citrus control committee, which resulted in the authority of that committee under the agricultural adjustment act being questioned in the federal court, was made in an announced effort to reduce the volume of fruit going to the four large eastern auction markets, though some contesting that ruling contend it did not in reality accomplish its announced purpose.

This is cited simply to show the citrus control committee's recognition of the fact that too many Florida oranges and grapefruit were being shipped to these markets for the good of the Florida industry. Whether legally or otherwise the citrus control committee is capable of combatting this situation seems to be a moot question among some of the best posted citrus men.

Some there were who urged that the AAA at Washington take directly upon its own shoulders right from the start the task of setting maximum figures for shipments into these auction markets.

Others, however, oppose such control, notably California shippers, who even refused to accept in the agreement covering citrus shipments from that state the authority looking toward prorating fruit sent into the large auctions.

Just what may or may not be done to remedy the situation which results from continued too great supplies of citrus fruit in the large auction markets may be a subject for debate; but there seeems to be general acceptance of the fact that the auctions slowly have been swallowing heretofore good f. o. b. markets.

New Haven, Conn., and Harrisburg, Pa., are just two examples of a great many once excellent markets for the purchase of Florida citrus fruits upon an f. o. b. basis which now draw their supplies almost exclusively from large centers, by truck or otherwise.

Harrisburg once bought around 400 carloads of Florida fruit direct from Florida each season Now it buys something less than 50 carloads a season directly from Florida, though the consumption of citrus fruits there seemingly has increased. These two examples are too far away for direct motor truck hauling from Florida to be of appreciable significance; they are obtaining their fruit from one or more of the big city auctions within reach.

"Price arrival" basis of selling, condemned outrightly by many, is a practice further hurtful to the possibility of f. o. b. sales, because it places fruit on which no earlier price has been named directly in otherwise f. o. b. market towns, there to be sold by agent for the shipper at whatever price it may bring.

To understand fully the effect of this practice it is necessary to understand the mental processes of the wholesalers who in towns of this character are the receivers of shipments of citrus fruits from Florida. More than the shipment of fruit not up to specified quality, they dread the possibility of a competitive receiver purchasing a carload of fruit at a price less than has been paid for the fruit then being offered to the retail trade.

A sharp wholesaler who can obtain an advantage of 25 cents a box on a carload of fruit purchased is in a position to undersell his competitive wholesalers by just that much. As a result he quickly cleans up his stock at a price the others can not meet, leaving them "stuck" with their stocks which are rapidly deteriorating on their hands due to their perishable nature. The average such wholesaler does business under a continuing dread of thus being "stuck" with a carload of fruit purchased at a price above that paid by one or more or his competitors. Only a few cars arriving in any such given market to be sold upon a "price arrival" basis thus are sufficient to disrupt the f. o.

(Continued on Page 22)



The Concentration and Movement Of Nitrate Nitrogen In Florida Citrus Soils

O. C. Bryan and John P. Camp*

It is commonly accepted that plants use only soluble forms of nitrogen, and of the soluble forms that occur in the soil or that may be applied in fertilizer, the nitrate form appears to be the most desirable for cultivated crops. Nitrate nitrogen is the end product of decomposition of nitrogenous materials that find their way into the soil. That is to say, nitrification is a process of transforming protein or organic nitrogen (such as that in fishmeal, tankage and crotalaria) into a soluble nitrate. This takes place under favorable conditions of moisture, aeration and temperature. During the process of transformation other forms of soluble nitrogen, as amino acids and ammonia. may occur. But these are temporary in nature and under most soil conditions are readily oxidized to nitrates. It is this form of nitrogen that is most useful to higher plants. This is the natural process of making soluble nitrogen in the soil.

Although nitrate nitrogen seems to be the most desirable form for plants, it is also the most likely to be leached from the soils. Yet, this is nature's method of completing the nitrogen cycle, and is perhaps a beneficial process in many ways. The amount of nitrates in the soil as related to profitable crop production has been a topic of much discussion and study. At the same time, the relation between the concentration of nitrates in the soil and citrus production in Florida is not definitely known. Nor is it known how rapidly the nitrates disappear in sandy soils during seasons of different amounts of rainfall.

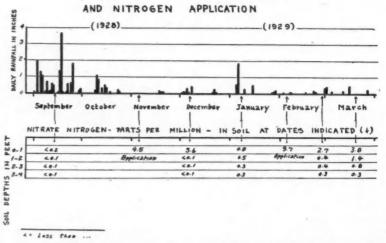
This study was undertaken to ascertain the relation between the rainfall and concentration of nitrate nitrogen in the common citrus soil of Florida under normal fertilizer practices and seasonal conditions. The work was made possible under a grant of funds from the Chilean Nitrate of Soda Educational Bureau.

The study was conducted under actual field conditions in order that

the results might have some practical value. Three separate citrus groves (one each in Lake, Polk and Highland Counties) all on the common ridge soil - Norfolk sand-were selected. They were fertilized three times per year, using the following rate of nitrate nitrogen in a complete fertilizer. In 1928, the plots studied received 17 pounds of a complete fertilizer per tree per application. The application in February contained 5.3%, that in May 3.1%, and that in November 2.6% of ammonia respectively. The plots in 1929 received 18 pounds of fertilizer having the same percent of ammonia as those of

er applications. It was found necessary to composite 12 to 16 individual soil borings for each sample to obtain reliable results. The samples were obtained at 12 inch depths down to 4 ft. in all groves, in 1928-1929. This, however, did not seem to be sufficient depth for study. Consequently, samples were secured to a depth of 10 ft. in the Lake County grove in 1930. The samples were either dried in the field or disinfected to check biological activities before bringing them to the laboratory for study. The standard (phenol-disulphonic acid) method for determining nitrate nitrogen was used. The re-

TABLE 1 - THE MOVEMENT OF NITRATE NITROGEN IN A CITRUS SOIL AS RELATED TO RAINFALL



1928. But the plots studied in 1930 received 20 pounds of fertilizer per tree per application. The application in February contained 8% ammonia, and that in May contained 4.5% ammonia. All the plots received 8% phosphoric acid at each application, and 3, 6 and 8 percent potash for the spring, summer and fall applications respectively.

Composite soil samples were secured from several differently treated blocks in all three groves at about 30 day intervals during 1928, 1929 and 1930. Considerable care and precaution was exercised in taking the samples of soil in order to reduce the possible error from irregular fertiliz-

sults together with the rate and date of applying nitrogen and rainfall were tabulated in tables 1 and 2. Although the rainfall data was taken from Eustis (8 miles from the Sorrento grove) it seemed to be satisfactory for the purposes of this study.

As previously indicated three groves were used in the study, but due to the fact that the results in each grove were parallel, only the data from the Lake county grove is herein discussed, by reason of the greater completeness of data in this grove. The results represent an average of several determinations over a period of three years and are as accurate as is practical under field conditions. It-

^{*}Professor of Soils, College of Agriculture and Assistant Agronomist, Experiment Station, respectively.

is interesting to note that no measurable differences in amounts of nitrate nitrogen in the soil were found in blocks receiving all nitrate nitrogen and those receiving mixed sources. This is probably due to the fact that the organic and ammonia forms were readily oxidized to nitrates.

A study of the data in tables 1 and 2 shows that the downward movement of the nitrate nitrogen in the soil is in proportion to the rainfall and is naturally greatest during the rainy season. That would be expected in a general way, especially on sandy soils. One to two inches of rain at any season are sufficient to cause a downward movement of the nitrates in the soil, especially if the soil is moist. Table 2 shows that the nitrates penetrate to a depth of 8 feet or below within a few days of rainy weath-

sult of fertilizer applications the concentration of nitrate nitrogen in the soil during the spring and early summer may run as high as 10-15 parts per million (depending on rate of fertilizer) in the zone of root concentration (4 ft.). This is reduced to less than .1 part per million before the end of the summer. Such a small quantity appears insufficient to supply nitrogen to hungry trees. (To convert parts per million of nitrate nitrogen, into pounds of ammonia per acre foot multiply by 5.)

The results indicate further that under average conditions the November application of fertilizer rarely penetrates to the zone of root concentration until January or February because of insufficient moisture. Of course this would not hold true with moist soils. Whether or not this low

traces — during the other half, July to January. In this connection it is interesting to note the tree response and concentration of nitrates in Califoria soils. According to Batchelor* a concentration of 2 to 10 parts per million of nitrate nitrogen in the zone of root concentration (3 ft.) appears to be sufficient for citrus under that climate. This concentration, however, is on a 12-month period, and would not be strictly comparable to Florida conditions. The data in this paper show a higher amount during about ½ the year and much lower the other half.

Taking all the results into consideration the following general statement appears to be in order.

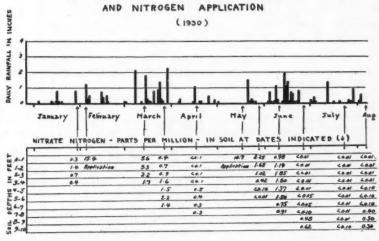
1. That the concentration of nitrates in Florida citrus soils (Norfolk sand) during the spring and early summer months is several times (50 to 100) higher than that in late summer and fall — July to January. This means that normally citrus fruits in Florida produce a large volume of their growth during a period of low nitrate level in the soil. Moreover it is rather improbable that the November application of fertilizer has very much immediate value because of the lack of soil moisture.

2. The light rainfall and consequent low moisture content of citrus soils. during the fall and winter months naturally retards nitrification processes and formation of nitrate nitrogen from organic sources. This may explain why organic nitrogen is usually less efficient for citrus than the inorganic. It would appear that irrigation during the fall and winter months when moisture is low, would not only improve the trees but enable them to absorb sufficient nitrogen and other nutrients to take care of the load of fruit, and also store sufficient reserve to set a crop the following spring. It stands to reason that a heavily loaded tree needs nutrients and that it cannot absorb them from a dry soil.

3. Nitrogen is leached from the soil in greatest amounts during the summer months because of heavy rainfall, and from the standpoint of economical fertilizer practices and leaching losses the grower might add proportionately larger amounts of nitrogen during the fall and spring and less during the summer. So far as nitrogen losses are concerned, applications just after the rainy season would be less likely to leach than those applied just preceding it.

4. From the standpoint of the (Continued on page 24)

TABLE 2 - THE MOVEMENT OF NITRATE NITROGEN IN A CITRUS SOIL AS RELATED TO RAINFALL



4 . Less Man ...

er. On the other hand, the downward movement is practically nil during the fall and winter-table 1. This means that in normal seasons the citrus trees in Florida have a very low nitrate level during the late summer and fall months, or about half of the year. In most instances the concentration of nitrate nitrogen in the soil during the late summer and fall was less than 1/2 lb per acre. This is of further interest because of the fact that citrus trees are carrying their greatest load of fruit during the season of lowest nitrate levels in the soil. From these results one is led to believe that the trees either store nitrogen during the level of high nitrate concentration in the soil-spring and early summer -or do not need more than traces during the late summer and fall when carrying the crop of fruit. As a relevel of available nitrate nitrogen during the fall and winter is conductive to the best quality of fruit is not definitely known. Certain observations indicate, however, that heavily loaded trees often show nitrogen needs. (Other observations indicate that low rainfall during spring and summer (insufficient for leaching) usually result in poor quality of fruit.) This sugests that the moisture was too low for absorption and storage of nitrogen in spring, or that too much nitrogen was available in late summer.

Regardless of what takes place in the trees and fruit, the results show rather definitely that the trees have access to a high content of nitrate nitrogen in the soil (5—12 parts per million) for about one-half the year, and a rather low nitrate level —

*California Citrograph, Sept. 1933.



The Citrus Industry

with which is merged The Citrus Leaf
Exclusive publication of the Citrus Growers and Shippers

Publication office, 550 North Broadway, Bartow, Florida. Executive and editorial offices: 312-313 Wallace S. Building, Tampa, Florida. Address all communications intended for the editor to the Tampa effice.

Published Monthly by

ASSOCIATED PUBLICATIONS CORPORATION
S. L. FRISBIE
G. LLOYD FRISBIE
FRANK KAY ANDERSON
A. G. MANN
Production Manager

Subscription, \$1.00 per year in advance

NEW YORK OFFICE 118 East 28th Street — Telephone Lexington V-4478 Edwin F. Ripley, Manager

CHICAGO REPRESENTATIVE: Joe Esler, 5484 Glenwood Avenue Telephone—Long Beach 8429

THE CITRUS CODE

By the time this issue of The Citrus Industry reaches its readers, the United States Circuit Court of Appeals at New Orleans will have rendered its decision on the appeal from the injunction issued by Federal Judge Akerman of Tampa restraining the Florida Citrus Control Committee from prorating shipments of citrus fruits. Since a temporary suspension of the injunction by the Court of Appeals, the Control Committee has been operating under a modified prorating program which has had a somewhat beneficial effect upon prices in Northern distributing markets.

Speaking of the situation as it affects the citrus interests of Florida and of the country as a whole, the California Citrograph says:

"While a judge of a lower federal court in Florida has issued an injunction against enforcement of the AAA citrus market agreement in his jurisdiction, attorneys state that his ruling does not apply elsewhere. California is proceeding with her prorate as heretofore. It is the general understanding that Secretary Wallace plans a prompt appeal to a higher court and hopes for an early decision from the U.S. supreme court.

"We predict that, as time goes on, even those who are now objecting will realize that the agreement is serving the best interest of the entire industry. As they begin to share in the bettered conditions they too will see that regulation of shipments will make it possible for the grower to realize a little proft for his labor and expenditures, whereas, without any control the market must revert to old chaotic conditions.

"It is our hope that the highest courts of the land will ultimately sustain the AAA con-

tract for the common good in spite of attempts to resist it."

In this view, The Citrus Industry heartily concurs. The citrus industry, not only in Florida but in California, Texas, Arizona and Porto Rico needs the sustaining and steadying hand of government control to put the industry on a permanently paying basis, and the sooner minor obstacles to its complete and successful operation are removed, the better will it be for the industry as a whole and for the individual growers, no matter what their present attitude may be.

The Citrus Industry confidently believes that in the final test the authority of the Agricultural Adjustment Administration will be sustained and that the Control Committee will be authorized to perform its functions as intended in the original agreement.

"ROCKING THE BOAT"

The Citrus Industry has no patience and no sympathy for any indvidual or group of individuals who at this time persist in carping criticism of the National administration in its efforts to bring about a readjustment of economic conditions, whether that criticism be directed toward the administration's handling of the air mail, its attempt to improve the banking situation or its efforts to better conditions in the citrus industry, nor whether such cirticism be made by great or small.

Now, for the first time since the World War, the National administration is trying to do something to better the condition of industry, finance, agriculture and the country in general. Until such time as the methods proposed and adopted have had time to demonstrate either the success or the failure of those efforts, the administration is entitled to the united support of the people in all walks of life.

This is no time to "rock the boat."

DANGER AHEAD

Orderly marketing of citrus fruits through control of distribution is important, indeed, it is essential to the perpetuity of the industry, and The Citrus Industry believes that every grower and every shipper should lend his efforts to bringing about such control that stabilization of prices may be secured.

But we very much fear that some growers, in their enthusiasm for control of distribution, are overlooking the fact that no degree of control of distribution will create a profitable market for undesirable fruit. In our efforts to secure control of distribution, we must not forget that the primary necessity is the production of fruit of high quality and appearance— the kind of fruit that will appeal to the taste and the eye of the ultimate consumer.

Having produced that kind of fruit, we must control distribution—and we must advertise. There is danger right now that many growers are forgetting the first and the last of these essentials and concentrating their entire efforts upon control of distribution.

ompare Results



with/

NACO BRAND FERTILIZERS

NITRATE AGENCIES COMPANY
JACKSONVILLE, FLORIDA

SOLD BY

YOUR LOCAL DEALER
AND AGENTS
ALL OVER FLORIDA

IMPRESSIONS

By Frank Kay Anderson

Baron Eugene George Horvath, 43, of Winter Park, member of the former Austrian nobility, drowned recently near St. George, S. C., when a truck he was driving, loaded with his own grapefruit and oranges, en route to Washington crashed through a bridge railing in the darkness into the stream beneath. A world war aviator of note in the Austro-Hungarian forces, he had been personally decorated by Field Marshall Von Hindenburg. Coming to America following the setting up of the Austrian republic, he and his family are reported to have been holders of considerable estates there. Last year he purchased the Goldenrod packing house and a thirty acre grove east of Winter Park from Fred R. Hall. The sheriff of Dorchester county, South Carolina, near Charleston, where the accident occurred, reported that evidently the driver had gone to sleep at the wheel, but that there were no eye witnesses to the accident. Driving a fruit truck evidently has its perils, no less than flying a fighting

Recapitulation of figures on the shipment of Florida citrus fruits to February 1 by the Growers and Shippers League of Florida showed that of this season's shipments to that date slightly less than one-half had moved by all rail, 49.44% to be exact. Thus slightly more than half had gone forward by truck or boat, considerably to the loss of both the railroads and the growers we'd hazard.

Henry Strickland of Duluth, Georgia, who recently has spent fifteen years in South Africa, tells us that hail is the great enemy of citrus growing in the Union, though last year a great drought, when no rain fell for more than twelve months, did great damage. We asked concerning the acreage of the great Zebella Plantation, the acknowledged largest citrus property in the world; but he didn't know. Some day we hope to get that straight.

Who can now remember the United Florida Growers?

From or through the Federal Land Bank of Columbia borrowings of approximately a million dollars per month average were made by Florida farmers and growers during the seven months ending February 1. Considering the long term nature and the low charges upon the average of such loans, it would be far fetched to call these borrowings excessive. While figures are lacking, we believe it is safe to say that the citrus groves of Florida have been very light borrowers when consideration is given to normal valuations per acre, perhaps the lightest of any specialized line of agriculture or horticulture in the

Failure of the Florida cross-state ship canal to obtain the approval of government engineers brought no wails of sadness from Florida grapefruit growers, instead a long, hearty sigh of relief.

The month of February was almost a record breaker in point of the interference by bad weather with normal citrus distribution in northern markets. With one blizzard following close upon the heels of another citrus distribution was seriously crippled over the larger part of the country where the Florida product is sold. Retail stocks in numerous centers dropped down to nothing, or almost nothing, because of the inability of jobbers to make deliveries through the severe cold, even though retail purchases were greatly curtailed by reason of the inability of consumers to get out to even their neighborhood stores.

Twice during February we, together with a couple of other market prophets, were sure that both oranges and grapefruit prices were due immediately to climb straight upward, then another blizzard knocked our predictions into a cocked hat. Grapefruit in particular, we felt, was, because of its highly improved eating quality and the relative shortage of the supply remaining in Florida, due to jump right up and start climbing a lamp post, so to speak. As it was it jumped a bit, but slid back in the

slipperiness of the blizzardy weather. However, when that weather has cleared over the big consuming markets, as it is due to do prior to the appearance of these lines in print, watch grapefruit.

None so unsmart as those who plead for damages due to the havoc of the fruit-fly eradication campaign, and in the same breath state there never was no such animal in Florida. Instead, why not admit not only the existence of the fly but the tremendous menace of it to the country as a whole, taking the preachings of the alarmists at their worst, and then go ahead to show how Florida was the Belgium devastated to save the other states of the Union? The latter tack could in no wise offend any bureau incumbent in Washington, and it makes a more logical and sentimental ground for asking for compensation. We are strong for seeing some money come into Florida in payment for these damages to many growers; but we believe the chances are slim for seeing the claims paid, even in part, when denial of the existence of the fly here is allowed to enter into the arguments.

The guy from the Boston area who was the hero (?) of the tomato juice episode at the Orange Festival has dropped in for some marked copies of last month's issue where it was recorded. Says it is the first notice taken by any Florida paper of his presence in the state. Seemed to feel the folks back home would know who was meant, even though his name wasn't mentioned.

Fellow in one of our large cities is prepared to sell lists of citrus growers in all counties of the state; says is prepared to supply names of nearly eighty thousand Florida citrus growers. Which is remindful of the little boy who exclaimed to his mother that were a thousand cats up on their roof.

"For nearly seven years the prosperity band-wagon rolled down Main Street. Not everyone could manage to climb aboard this wagon, Mighty THE CTRUS LUDISTRY

few farmers could get much as a fingerhold upon it. So adairymen clung there, to be su e and fruitgrowers and truck-gardeners. For prodigious changes were taking place in the nation's diet as the result of the public's discovery of the useful vitamin, the propaganda for a more varied menu, and the invention of better methods of shipping perishable foods. Between 1919 and 1926 the national production of milk and milk products increased by one-third and that of ice-cream alone took a 45per-cent jump. Between 1919 and 1928 as families learned there were vitamins in celery, spinach and carrots, and became accustomed to serving fresh vegetables the year round, along with fresh fruits, the acreage of nineteen commercial truck vegetable crops nearly doubled, even though the growers of staple crops such as wheat and corn and cotton were in a bad way." Frederick Lewis Allen in Only Yesterday, p 160.

First time in this column ever we have recommended a book, but we hardly believe there is a reader of these lines who will not feel well compensated for his time spent in reading Only Yesterday. We disagree with Mr. Allen's views upon numerous subjects, but certainly he has held up a mirror to the freakish behavior of the American public during the '20's.

Supplementing the author's statement we have quoted, we recall it was in 1919-21 that a former Indiana physician of high standing by personal letter and by advertisements in the Journal of the American Medical Association, and other medical publications, called the attention of doctors, dieticians and nurses to the fact that latest scientific research established not only the very valuable vitamin content of oranges and grapefruit (their food value in calories having been earlier established), but that these fruits when ripe created a decided alkaline reaction in the human system, instead of an acid reaction as had earlier been attributed to them.

As a result these same doctors and dieticians and nurses began to boost for oranges and grapefruit in the diet with a spontaneity and enthusiasm which reached a peak when Dr. Williams Evans, city health commissioner for Chicago, and Dr. (now Senator) Royal S. Copeland of New York, in the respective columns then being conducted by them which reached through one newspaper or another

perhaps half the population east of the Mississippi river, came out with statements concerning the later scientific research which had established the alkaline reaction of these fruits when ripe, and further recommended their use freely to sufferers from colds and flu.

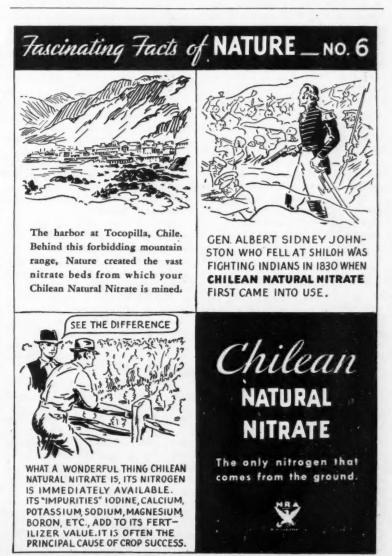
Both Dr. Evans and Dr. Copeland had been engaging in lengthy correspondence with the former Indiana physician, who was then living in Florida, at Winter Haven; and whose name was Ross—Dr. John H. Ross—one time prominent medical practitioner of Kokomo, Indiana, but then and for a number of years previous, president of the Florida Citrus Exchange, which footed the bills for these advertisements and his correspondence as part of its then importions. Dr. Ross' part in selling prac-

tant annual advertising appropriatically the entire American Medical Association on the vitamin content and alkaline reaction of oranges and grapefruit constitutes, in our humble opinion, the most important contribution to the cause of the citrus growers of the country to date made by any individual.

What might be called the joker in connection with the alkaline reaction of oranges and grapefruit lies in the two words "when ripe" which means fully ripe. Since Dr. Ross' passing there seems some danger of this being forgotten by some growers and shippers.

Also, and this need not be stressed outside our citrus family, tangerines cannot be assumed to be included in

(Continued on page 18)



Assisting The Citrus Industry of Florida In Problems Which Depression Has Made More Acute

By Jefferson Thomas

Whether the trend downward of prices for citrus fruits has been due mostly to economic conditions or to marketing inefficiency, the effect has been increase and intensification in the problems of the growers. In endeavor for self-preservation they have been compelled to consider ways and means for cutting costs in the greatest degree feasible. Production of fruit with smaller outlay wherever possible has necessarily become a major objective of most grove owners.

Information of a dependable character bearing on the subject has been much in demand. Data assembled by experimental and investigative agencies under federal and state direction offered a great deal that was of immense value. Ways and means for making contact with these findings assumed enlarged importance. Citrus growers of the state in consequence have come to regard more highly than ever the State Agricultural Extension Service, and to utilize it with greater frequency.

Operated as a division of the College of Agriculture at the University of Florida, and supported by congressional, legislative and county commissioners' appropriations, this agency has intimate contacts with rural people throughout Florida. The Agricultural Extension Service of Florida acts as a connecting link between research and practice, through its efficient field organization. Discoveries made at the State Experiment Station find their way into farm and grove utilization largely by means of the Extension Service.

With the dean of the College of Agriculture as director, the Extension Service is supervised in detail by an assistant director. Under him are three district agents and nine specialists in farming activities of major importance. Then come the county farm and home demonstration agents, who confine their energies to specified local units. At present,

forty of the sixty-seven counties in the state are employing agricultural agents, and a slightly smaller number utilize home demonstration workers.

Citrus Share In Work

While only fifteen of the forty county agents are located in territory where citrus fruits constitute a principal farming industry, the greater part of the grapefruit and orange areas are covered by the service. All told, less than a dozen of the counties that produce citrus heavily are without representation.

Two of the three district agents devote a large part of their energies to citrus growing counties. Five of the nine extension specialists are partially or wholly engaged with fruit production or marketing. In the activities of E. F. DeBusk, the citriculturist, is concentrated, however, a substantial portion of the grove service that is rendered.

Working with and through the county agents in citrus sections, Mr. DeBusk meets growers frequently for discussion of grove and soil management, disease and insect control and miscellaneous topics. A review of the record for last year discloses that the extension citriculturist held more than 300 conferences in ten counties, assisting with 132 meetings and schools of instruction in fourteen counties, having an attendance in excess of 3,000.

All Extension Service projects in the citrus field now are centered around reductions in the costs of production, without sacrifice of quality in output or danger to the life of the trees. Improved management practices are considered principally in demonstration groves located so they are convenient of access by growers. Results are measured by checking costs, item by item, with those of comparable groves, and by similar comparisons on yields. More than 300 growers have been induced to keep grove records accurately, and they are so distributed as to afford

a representative cross-section of the industry.

Citrus schools in the several communities further develop the plan. Ten were conducted last season, with an enrollment of over 400, operating about 16,000 grove acres. Courses given in all cases are practical and up-to-date, placing emphasis on economic phases of the growers' problems. In one county, with five schools, a horticultural board has been formed, composed of delegates from each of the community units. In all the schools, essential features of citrus culture are stressed, and untried theories are avoided as far as possible. New methods of merit are subjected to tests in the fact-finding demonstrations.

Reducing Grove Costs

Production costs in almost every chief item are lower in the demonstration groves supervised by the Agricultural Extension Service than in check groves having almost exactly the same conditions. Growers are attracted to the former by the superior appearance of the trees, in most

Through more than forty demonstrations, growers have been convinced that costs safely may be kept down by supplying to the grove large amounts of bulky organic matter, by the full use of cover crops and by hauling in manure and other vegetable substances. Raw phosphate has given definite results in stimulating cover crops and in improving soil conditions.

Crotalaria has responded to the use of lime and magnesium lime in groves, under certain circumstances. In twenty-four demonstrations, a dollar's worth of cheap nitrogen has given an average increase in grass cover crop yield of approximately 1,000 pounds per acre, dry weight, with a value in many cases of \$5.00 per ton. Mowing cover crops and placing them around the trees as mulch enlarged

(Continued on page 16)

CITRUS NEWS FLASHES



DAILY AT NOON

Monday to Friday, inclusive

Tune in

WSUN-Clearwater

WDBO-Orlando

Latest wire news about Citrus Markets and Prices

This program is sponsored by

THE AMERICAN AGRICULTURAL CHEMICAL CO.

AGRICO

The fertilizer with the extra plant foods



ASSISTING THE CITRUS INDUSTRY OF FLORIDA IN PROBLEMS WHICH DEPRESSION HAS MADE INFINITELY MORE A C U T E

(Continued from page 14)
the output of fruit from five to
twenty percent in more than one hundred demonstrations.

Cultivation of groves has been found in large measure unnecessary, and frequently injurious and wasteful. Except for mixing the cover crop material with the top soil at the end of the growing season, as a means of fire protection, doubt exsits as to whether any further cultivation is justified, when ordinary conditions prevail. Research has shown that decomposition of organic matter is hastened in direct proportion to the number of grove cultivations. Texture of fruit suffers when the soil is stirred excessively.

Demonstrations with respect to cultivations are designed to develop the minimum needed, and to establish the most economical programs under given conditions. In excess of eighty of them have been conducted, with growers of ten counties taking part. In addition, more than three hundred consultations on cultivation practices were held with individual grove owners. Saving in actual operating costs for the growers of a single county, directly resulting, are estimated at over \$10,000.00, constituting a significant item in aggregate production outlay.

Rainfall deficiency in recent months has caused many groves to suffer from lack of soil moisture. Growers have become more interested in irrigation as a consequence, and the Extension Service workers assisted in installing plants serving over 1,600 acres. Help also has been given to ninety-five growers in improving methods of applying irrigation water. With twenty-three proceeding demonstrations the objective is economics in cultivation that will offset the expense of irrigation. Heavier cover crop yields also would be assured, and nearer an adequate supply of organic material.

Disease and Pest Control

Citrus activities of the Florida Agricultural Extension Service in disease and pest control for several years have been devoted largely to finding efficient indirect methods, and toward developing reliable means of prevention.

Melanose and stem-end rot, dieback and ammoniation, bummosis and psorosis have had particular attention, among diseases. Keeping down the production of dead wood provides indirect control of melanose and saves on the cost of the bordeaux-oil application required for direct effects.

When soil moisture is lacking, fertilizer has been improperly applied or roots broken by deep cultivation, dieback of twigs and branches soon follows. In some cases twigs are killed by scale insects, and again improper use of oil in scale control has the same result. Handling of these diseases and related ones resolves itself into a big problem of soil management and cultural practice. Demonstrations are planned with this fart in view.

Fruit abrasions, caused by rough treatment on the way from the trees through the packing houses, in seventy percent of the cases lead to decay before the grapefruit or oranges are consumed. Blue mold infection is principally due to this factor. Demonstrations in handling and packing, to obviate the damage, were given in thirteen meetings with growers and packers held last year, affecting approximately 2,200,000 boxes of output. The message conveyed on these occasions also was widely distributed through press stories and by means of talks broadcast over radio. Clippers and like equipment that give best results were described.

Control of melanose by spraying proved more successful than formerly in last season's demonstrations, owing to normal bloom and generally favorable conditions. On scab, in a few cases, the dormant spray of limesulphur 1-25 gave satisfactory results. Bordeaux applied at the same time afforded better control. Foot rot present in light infections has been prevented from spread by giving all the trees in the groves a "foot bath," using a 6-9-50 bordeaux mixture applied with power sprayers adjusted to throw penetrating streams in among the crown roots. In advanced stages, banking or "mounding" the trees has been demonstrated. Dirt or clay built up around the trees to a height of fourteen or fifteen inches, and ten to fifteen feet in diameter, enables the establishment of new root systems.

Rust mite control work mostly was in keeping growers reminded of the economic importance given to it by the heavy crop of fruit grown this season. Information also was supplied as to the right period during the infestation for spraying or dusting to be done. Demonstrations were conducted in communities where interest was lagging. Practice of rust mite control is more universally followed in Florida than that directed at other pests or Jiseases. Extension Service part in the program principally con-

sists of furnishing data concerning the proper time to spray or dust. Marking calendar dates does not give a correct guide. Growers need to be advised how to recognize the insect and to know at what stage in its development spraying or dusting should be attended to in particular groves, and county agents find them increasingly alive to this phase.

Natural control of scale insects and whiteflies has been developed until it yearly saves many thousands of dollars for people engaged in the citrus industry. Demonstration groves in numerous instances were not sprayed for scale last season, and were as free from injury as check groves receiving applications twice a year. The trees in the former showed greater vigor and produced larger crops of fruit. Three cents invested in nitrogen for the tree frequently has done more to get rid of scale than fifteen cents spent on oil spraying. If the grove is rightly fertilized, light attacks of scale will be withstood while hungry trees prove themselves to be feeble fighters. Red aschersonia has given excellent control for whiteflies and in demonstrations showed a saving of as high as \$7.50 an acre when compared with costs of spraying with oil. Difficulties still attend the use of certain entomogenous fungi, however, since so far culture for general distribution has been impracticable.

In the case of demonstration groves where cultivation has been lessened by three-fourths from the customary practice, with heavier cover crops and the centers of the trees left unpruned conditions have been created that favored the development of scale fungi to an extent permitting the omission of spraying for scale control through four years. These demonstrations have directly covered more than 4,000 acres of citrus. Other features stressed in the Extension Service dealings with grove problems have been prevention of overcropping in tangerines, and splitting of fruit. Pruning demonstrations have brought out that far too much cutting away often is done the first thing when rejuvenation of run down trees is undertaken. Grove equipment suggestions have been warmly welcomed during the depression period and growers have been more eager for cost record assistance than ever before. Marginal groves are going out of production in some instances but the data on reduced costs disseminated within the past three years has helped to avoid abandoment or serious neglect in a much greater number of properties.

0es

ed TY

ind ned hat

ale the

con-

emered Othsion ems ping ruit. ight

> way re-

> > unges-

med and

> for beout

but nathas serium-

Read this letter-from a well known March, 1934 fruit packer

Gulf Fertilizer Company Tampa, Florida

Gentlemen:

During our operations each season we are fortunate enough to buy or handle a good many crops of real quality.

Each time a crop of this type comes in there is considerable comment about the contrast to the general run of fruit produced.

Naturally, when we handle quality fruit we try to find why one grove produces so much better fruit than another and we find the answer to be in a great number of cases - Gulf Fertilizer plus Gulf Service and Attention.

We all agree that our citrus industry is in need of several remedies and we hope that the Government can work them out. However, we firmly believe that the best results will be obtained for all concerned by the increased production of better quality fruit.

As shippers, we can appreciate the results you are getting along these lines and hope that each season we will have the opportunity of handling more and more Gulf Grown Citrus.

Yours very truly,

One of Florida's well known fruit packers (Name on request)

Gulf Brands and Gulf Service can help you grow quality crops too. Use them from now on and see what a big difference real fertilizer makes:

•The Gulf Fertilizer Company, Tampa, Florida.

IMPRESSIONS

(Continued from page 13) certain of the statements which truthfully may be made concerning the health benefits of oranges and grapefruit.

J. C. (Jim) Morton of Auburndale is well known in Florida citrus circles but other members of his family are not so widely known. Have you ever met Jim's Big Brother?

Big Brother is quite a writer, albeit his style is a bit peculiar. He writes it this way:

"Something old, something (w) new,
"Something borrowed, something
(w) blue."

The "(w)" stands for Whoopee!

In a way this has been the most peculiar orange season ever. Pineapple oranges went to market freely in the Fall and early Winter, during the period when Florida has been accustomed to ship seedling oranges. Seedlings during this time were blocked out of the markets entirely. Then when it came the time when once it was customary to ship pineapple oranges, nobody seemed to know what to do with the seedling fruit. On the surface it might look like the greatest marketing blunder of all time; but it is a fact that it was not until after the first week in January that seedling oranges ripened sufficiently to lose an extreme tartness most unusual to them.

Now we have been a booster right along for the efforts of the Agricultural Adjustment Administration to aid the citrus growers of the country. Perhaps some will remember that THE CITRUS INDUSTRY quite some years ago recommended a voluntary association of the growers and shippers of the three great U. S. citrus producing areas looking toward more unified shipping programs. Maybe that was why we favored the idea of governmental aid to that end when it was proposed. This writer still favors the effort, but most respectfully offers the suggestion that the proration of shipments to the larger auction markets be tried out and developed first in California where there are far fewer selling factors to be given consideration. Then, with an example to follow, it may be easier of accomplishment here. Selecting Florida as the field for first trial of the experiment, with California sitting by and observing, seems to us rather doubtful expediency.

Meantime none should jump at the

conclusion that the Secretary or any of the employees of the Florida Control Committee have soft snaps. We have been dropping in on them unexpectedly at all times of the day, and there is a lot of hard work going on in that place. A comparatively simple order from the Committee creates a vast deal of detail work which someone must do.

Suggestion for a new brand-name in keeping with the times, for one of those packing houses which insists upon naming its fruit for some denizen of the animal kingdom— The Nude Eel.

Rumor persists concerning a complete reorganization of the Florida Citrus Exchange said to be scheduled to take place this spring. If the gossip is to be believed there will not only be new officers, but a complete overhauling of the cooperative- a much smaller board of directors, new methods of electing, and basic changes in the organic law of the institution, possibly the closing of packing houses obtaining insufficient volume for profitable operaton; and a lot of other radical predictions. To date, however, no one seems willing to sponsor the yarn. It is simply a case of, "according to what I have heard," or "if what I am told is correct."

The wise chaps possessing fragments of this information mostly seem to credit the proposed revamping of the cooperative to the federal farm finance body's initiation, seemingly in the belief that it is to be the aftermath of heavy earlier borrowings from the once highly touted Federal Farm Board.

One rumor to the effect that C. C. Commander will be succeeded by a man heretofore not identified at any time with the Exchange but once quite prominent in connection with certain attempts at industry coordination intrigues us. Of course, it could happen— over the dead bodies of some six thousand growers of the Exchange.

Then the rumor concerning the brand new statewide citrus cooperative still persists. At a recent citrus gathering eight growers of some prominence withdrew to a hotel room by themselves to discuss in private a quart of the new legal liquor which one had just brought down from Chicago; and were considerably embarassed at the close of that discussion by questions concerning the new cooperative they were forming, and by

a newspaper man demanding a formal statement of the result of their discussions.

Recently we recorded that Jefferson Thomas now is engaged with the State Experiment Station at Gainesville. Since then we have had numerous inquiries as to the nature of his employment there. We are not authorized, either by Jeff or by Dr. Harold Hume to make any statement, but in strict confidence will say we have a hunch it is in connection with the further development of the bayonetgopher, which project Jeff has been studying upon for a long time. As everyone knows, it is the custom of rattlesnakes to take shelter in gopher holes against everything which menaces them, particularly against thunder. If we had no gopher-holes in Florida manifestly we should have far fewer rattlesnakes. How then to drive the snakes out into the open? It seems entirely logical that the bayonet-gopher may be the answer to this pressing Florida problem. The project, No. 4711, involves crossing the common, or garden, variety of Florida gopher with the Spanish bayonet. The resulting heavy, spiny, spikes upon the exterior of the gopher's shell it is anticipated will result in making the gophers entirely incompatible to the rattlesnakes, to such extent, in point of fact, that the ratlesnakes will desert the gopher-holes and take to the peersimmon trees. There, after the first frosts, it should be relatively easy to hunt down, or up, and exterminate the snakes.

Lime-sulfur, used effectively as a control for scale insects in the State Experiment Station testing grounds, was found to stick better when a pound of iron sulfate was added to each fifty gallons.

Maturity data on avocados, complete in character, have been compiled at the Florida Agricultural Experiment Station in studies begun during 1929 and recently finished.

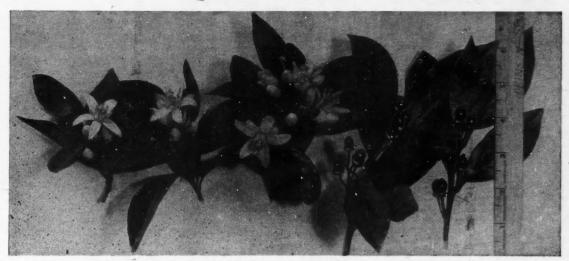
Detailed Soil Analysis and Interpretations, Estimation of Plant Food Requirements and Soil Toxins.

\$2.50

SOIL LABORATORY Frostproof, Fla.

NV

SULPHATE OF POTASH is the QUALITY builder



THIS photograph shows short, thick, well-nourished growth from a tree kept well supplied with fertilizer balanced with plenty of potash. Note the closely spaced, normal sized, dark green leaves with the young fruits set close to the leaves for efficient feeding.

These leaves keep the young fruits supplied with necessary plant food from your fertilizer. Such growth is not excessive, but stops when the bloom sets and then all of the tree energy is devoted to developing and maturing fruit into the top grade.

NV Sulphate of Potash is the quality-producing element in citrus fertilizer and quality

fruit begins with the bloom. That is why it is so important to make sure your spring application of fertilizer is well-balanced with 10% potash derived from NV Sulphate of Potash.

Potash-hungry trees start early to develop excessive vegetative tendencies. Leaves are far apart and growth continues rather than the

energy being used for bloom and fruit set. The fruiting tendency is sacrificed. The flush of growth is poorly distributed, appearing mainly at the tops of the trees. When fruit is finally set it is usually coarse, rough and ammoniated.

Your trees are most active in the spring. They need the extra stamina that potash gives them. Potash starts them off right and keeps them on the job straight through to a quality crop.

Start now to keep your trees well supplied with fertilizer well-balanced with 10% potash derived from NV Sulphate of Potash, the quality-producing element. It produces smooth, well-

shaped fruit with fine finish, high color, excellent texture and a large volume of juice with the proper content of solids. POTASH PAYS!

N.V. POTASH EXPORT MY., INC. Hurt Bldg., Atlanta, Ga.

J. L. Baskin, Representative, Box 1051, Orlando, Fla.

MAKE SURE YOUR FERTILIZER CONTAINS AT LEAST 10% POTASH

THE OUTLOOK FOR THE CITRUS INDUSTRY UNDER GOVERNMENT CONTROL

(Continued from page 5)

Some wanted one thing and some another. High powered orators told the Department just what to do and other orators, equally high powered, warned the Department not to do it.

With all this confusion and contradiction at home, how in the name of heaven could those in authority in Washington be expected to quickly put together a jig-saw puzzle that we, supposedly with some knowledge of the game, couldn't solve ourselves!

And there let me pay brief tribute to the men in Washington—the gentleman who will next address you, was the one directly in charge of our hearings—who have worked with us day and night the past several months.

I have never known a harder working group of men anywhere who honestly and sincerely have tried to untangle our many problems. They have been at our beck and call at any hour of the day or night.

They have dispensed with all needless formalities and worked with us shoulder to shoulder in their shirt sleeves time and again.

Their sole desire has been to help us and if they haven't worked as fast as you wanted them to work, or done just the things that you felt should be done, don't put it down to indifference.

The present Agreement was completed and the Florida Control Committee came officially into being on December 14th, 1933.

The Shipper's Agreement, as finally drawn and accepted, was by no means considered perfect either by the Department or the Control Committee.

Many complications, both from a practical operating and legal standpoint, still remained to be worked out, but it was deemed wise to accept what could be given at the time and later to iron out the imperfections, rather than to go through the entire shipping season with no Agreement at all.

A minority group of Shippers vigorously opposed this thought and steadfastly insisted that no Agreement be accepted unless it conformed literally to the Agreement approved by growers and shippers at the meeting held in Lakeland on September 1st.

This group has since continued to voice its opposition to some of the terms of the Agreement as adopted, particularly with reference to the clause covering prorates or allotments to shippers.

No useful purpose can here be

served to go into the details of that controversy.

It is enough to say that changes and amendments have already been made, and doubtless will continue to be made by the Department, as changes and amendments are found necessary or advisable. It must be borne in mind that in making these changes, the question of the legality of such changes must always be carefully considered.

This brings us to the aims and purposes of the Control Committee, what it has accomplished, and what it hopes to accomplish.

Put in the simplest language possible it may be said that the sole purpose of the Control Committee, operating as a Governmental Agency, is to so regulate and control shipments of citrus fruit from Florida to outside markets, that an orderly system of marketing can be maintained throughout the marketing season.

That shipments may be so regulated and controlled as at no time to glut the markets, but to provide an even flow of fruit through the channels of trade, so that the supply of fruit at any given time will not exceed the demand.

The old law of supply and demand, after all, always has, and always will, largely govern the price for which any article of commerce may be sold, and in this instance, must automatically determine what the grower is to receive for his fruit.

Were the twenty odd millions of boxes of fruit produced in Florida owned by one unit of the industry, instead of by 16,000 individuals, the process of orderly marketing would be very simple. There would then be no attempt to crowd at a given time, say 10 cars of fruit into a market, which at such time could normally consume but 5 cars. Surely a 10 year old child could understand that.

Keep in mind we are not dealing in pig-iron or lumber, which, in case of error in shipping, can be rehandled or even stored for long periods, but a perishable, delicate food product, which must reach the consumer quickly and in good condition to be satisfactory, or even usable.

Certain markets are considered more desirable than others, especially the larger seaboard markets which can be reached with water shipments. These particular markets draw and attract as does a magnet, and with the eye of every shipper on them we find a surplus of fruit being rushed there by rail and water, to the end that these markets are being continually broken down and demoralized—and inevitably the grower is left holding

the bag.

The railroads and the packing houses get theirs, as does the large army of middlemen. Also the fertilizer houses and those supplying spray materials get theirs. Labor also gets its wage. And the grower gets just what there is left to get, after everyone else is paid in full. If he is lucky enough to escape red ink then he receives some mere pittance to apply against production costs.

All this has been told, time and again and needs no repeating so we will get back to the Control Committee,

It is the job of the Control Committee to get the 16,000 or more growers, insofar as possible, to function as one sane, sensible, business-like individual instead of as a mob, as is now the case.

This is a gigantic task, but it will mean bringing law and order to the major industry of Florida, which unregulated and uncontrolled, has blundered its way to the jumping-off place.

It is the problem of the Control Committee, to tell each of the 275, and more, Shippers that handle the crop of the 16,000, growers, what grades of fruit he can ship, and when he can ship it.

There is no conceivable plan of proration, or of restriction, that can be devised, that will satisfy all of these many Shippers.

Not a single regulation can be made that will not bring criticism from some quarter.

Going a step farther, probably no restriction could be imposed that would not, at the time, adversely effect some member of the Control Committe.

That much the Committee has already learned from its brief experience. Also it has learned that no Shipper has any objection to OTHER Shippers being regulated. When it hits home, it is a different story.

Some amusing things have occurred in this connection, only one or two of which I shall take the time to tell, but they will give you an idea of our problem.

When the first Committee order went into effect I received a frantic call from one of the smaller shippers who told me we were going to ruin him. He said he was handling only the lower grades of fruit, mostly number threes. In answer to my question as to what he wanted me to do about it, he urged that we restrict the movement of number ones and twos and permit only the number threes to go out.

(Continued on page 24)

Marketing Agencies contributing 3c per box to the grapefruit advertising campaign are:

American Fruit Growers, Orlando Adams Packing Company, Auburndale Atwood Fruit Company, Palmetto Barnes, John S. Inc., Plant City Babson Park C. G. A., Babson Park Chandler-Davis Co., Lakeland Citrus Grove Dev. Co., Babson Park Eichelberger, Jos., Eustis Gale & Company, Georgetown Holly Hill Fruit Prod., Davenport Keene, R. D., Winter Garden Lake Fruit Co. Inc., Eustis Lake Garfield Nursery Co., Bartow Lee County Pkg. Co., Ft. Myers Lee, W. E. Inc., Tampa Lake Garfield Groves, Bartow Lakeland-Highlands Corp., Highlands City

Maxey, Gregg, Sebring
Maxey, L. Inc., Frostproof
Mouser, W. H. & Co., Orlando
Orlando Bulk Fruit Co., Orlando
Skinner, F. L., Dunedin
Southern Fruit Dists., Winter Garden
Warren Packing Co., Haines City
Waverly Growers Coop., Waverly
Welles Fruit Co., Arcadia

In addition to these, the following Associations of the Florida Citrus Exchange are paying the 3c assessment:

Avon Park Citrus Growers Assn., Babson Park Chase Citrus Sub-Exchange, Sanford

Chase Citrus Sub-Exchange, Santord Dundee Citrus Growers Assn., Dundee Elfers Citrus Growers Assn., Elfers Florence C. G. A., Florence Villa Haines City C. G. A., Haines City Highland Park Pkg. House, Lake Wales

International Fruit Co., Tampa
Lake Region Pkg. Assn., Tavares
Lake Byrd Cit. Pkg. Co., Avon Park
Mount Dora C. G. A., Mount Dora
Oslo Packing Co., Vero Beach
Plymouth C. G. A., Plymouth
Silver Palm C. G. A., Homestead
Sarasota C. G. A., Sarasota
Silver Springs Fruit Co., Ocala
West Orange C. G. A., Winter Garden
Winter Garden C. G. A., Winter
Garden

Winter Haven C. G. A., Winter Haven

This is coming direct from those Associations who have signed individual contracts, and is not assessed by the Florida Citrus Exchange.

Start the Day Right

DRINK... EAT GRAPEFRUIT

G OLDEN glowing fruit ripened in the warm Florida sunshine. Helps build your resistance against Winter ills. Valuable vitamins . . . calcium and phosphorus . . . Dullness, acids, toxins quickly neutralized by this marvelous tonic-alkaline. Eat Florida grapefruit. Drink its juice generously.

NATURES OWN TONIC!

This is one of a series of Florida Grapefruit ads appearing daily in four principal northern metropolitan markets. Campaign sponsored by prominent Florida shippers in a statewide effort to build up bigger sales and better prices for citrus.

He

set

M

ing

th

be

So

da

be

the

le

ue

tis

E

ye

la

th

Y

tie

di

er

ev

WALLACE CAN SAVE CIT-

RUS THROUGH F. O. F.

b. buying practice in that market.

California Started It

In fairness to Florida citrus concerns it should be stated here that the "price arrival" method was devised and put into use by, and continues to be used largely by, California citrus shippers, particularly the great California cooperative citrus sales agency.

Due to the unusual freight rate basis enjoyed by California citrus fruits, which gives the benefit of a flat rate to all points east of Denver, except in New England, California shippers largely employ the "move up" system. That is, they will offer a car, not by telegraph but through actual presence and with the privilege of inspection by receiver, in, say for instance Omaha, Neb. Failing to make a satisfactory sale there, it may be offered the next day in Des Moines, the following day in Rock Island, Ill., the day after in Indianapolis, then in Buffalo, or where will you on the route generally eastward, for the freight rate from Los Angeles, or anywhere in the California citrus belt, is identically the same to all points named.

Due to different freight rates from almost all Florida citrus shipping points, and wholly different freight rates from Florida to each and every northern receiving point, and further due to vastly different diversion privileges, Florida is absolutely barred from using this "move-up" system in effecting citrus sales.

This is something not generally understood outside citrus shipping circles; and is said to have resulted many times in harsh and wholly unmerited criticism of Florida citrus selling methods by uninformed or partially informed, persons. There are some in Florida who criticize the federal agricultural authorities and others, because those authorities apparently fail to appreciate how different are the Florida and the California selling problems, due to the vastly differing systems of freight rates which govern their selling.

California Vs. Florida

This story of the battle of freight rates is an old one. Time and space forbid its discussion here. The Florida citrus industry "growed up like Topsy" over a period of 300 years, and its freight rates grew up with it. The California citrus industry dates from the time following the Big Freeze in 1895 in Florida, and its freight rates were scientifically laid down by the western rail carriers to

permit the advantage of wide distribution and scientific sales effort to the growers of the Pacific slope. California's freight rate bases remain undisturbed despite an ever continuing battle by Florida citrus interests since Florida began its comeback following the '95 disaster.

The "price arrival" method of selling citrus fruits is a California device, but, notwithstanding the fact that Florida shippers can not use the "move up" system advantageously, some Florida citrus shippers have followed into the use of "price arrival" selling. Some contend it is necessary to combat California; but it seems generally admitted that "price arrival" selling and f. o. b. selling can not be carried on simultaneously in the same market with any success for the f. o. b. selling method.

The perishable agricultural commodities act (PAC) which some blame for exerting further baneful effect of Florida's old practice of f. o. b. selling, is just another piece of well intended federal legislation which in practice does not seem to have worked out in the manner it theoretically was calculated to do. Designed actually to protect f. o. b. selling, it puts the burden of proof upon the receiver quite heavily for rejecting any shipment because of excessive decay (3 per cent decay is by long trade practice permitted on citrus fruits), delay in making shipment, failure of grade or pack to be up to specified agreement, or what not.

Always there have been a certain number of rascally, or unscrupulous, receivers of produce; and apparently there have always been a certain number of rascally, or unscrupulous, shippers of produce in these United States. The actual effect of the PAC act in practice seems to have been to put both the rascally and the conscientious receivers of produce at the mercy of the rascally shippers.

At any rate, even while many find points of great excellence in the PAC act, figures show it to have had the effect of diminishing f. o. b. sales of perishable foodstuffs over the entire country.

The Idaho potato growers, and other shipping organizations in the produce field, have since its enactment petitioned for the repeal of the PAC act, giving as a reason the desire to preserve their former method of f. o. b. selling. Just how far the imperfections of the PAC act exert an effect upon Florida's f. o. b. selling is problematical, but it deserves to be cited as one of the several factors affecting the practice.

What can be done about it?
What can the agricultural adjustment administration do about it?

Those are big questions.

No one seems to have the answer handy.

Perhaps the best answer this writer obtained while on the rounds of inquiry came from an old-timer in the Florida citrus world.

He said: Either the agricultural adjustment administration has all the authority necessary to straighten things out, or it has no authority. That is something which the courts are going to decide, let us hope speedily. If it develops that the AAA has the authority, it can quickly rectify the situation and bring a return of the old practice of f. o. b. selling.

To do so it will need do but two things.

One is to put a ban upon "price arrival" shipments. A little research should establish clearly abundant reason for doing this.

Then it can set up a bureau at Washington (a very small one is all that will be required), which will limit the maximum number of carloads of citrus fruits from each U. S. citrus producing area which will be allowed to be sold in each of the various established fruit auction markets of the country in any week, calculating these allowances scientifically to prevent the glutting of any of those markets in any week. These allotments to the auctions should be prorated to the auctions, with no attempt to prorate them at the shipping end. If proper prorates are made to each auction, the shipments very quickly will be prorated automatically, and without need for any formal order, shipping point policing or anything of the sort.

A small Washington bureau, consisting of four or five employes at most, headed by a thoroughly competent citrus man who understands what he is attempting to accomplish, exerting the authority of the AAA simply to ban "price arrival" shipping and to prevent the glut of any of the important auctions can very speedily restore f. o. b. selling to all the citrus producing areas of this country; and incidentally, do more to assure the growers receiving the cost of the fruit they have produced than can hope to be done by complicated set-ups, large committees and cumbersome and expensive organizations in each producing field, plus a further super-organization at Washington."

More than 48,000 acres of national forest land were pla ted to trees this fall, the U. S. Forest Service reports.



934

ust-

wer ritof

in

ad-

the

ten

ity.

rts

ope

AA

cti-

ırn

ng.

ar-

rch

all

vill

ar-

U.

va-

ar-

al-

al-

of

al-

at-

ng

ry

al-

nal

ıy-

n-

at

at

m-

ng

nd

uit

to

X.

0-

Hairda State Harticultural Society

Forty Seventh Annual Meeting Florida State Horticulutral Society Orlando, Florida, May 1, 2, 3, 1914

The dates for the forty-seventh annual meeting of the Florida State Horticultural Society which is to be held in Orlando this year have been set for May 1st, 2nd and 3rd. The meeting opens on Tuesday evening, May 1st, and closes Thursday evening, May 3rd, with three sessions each on Wednesday and Thursday. Meeting with the Horticultural Society will be the Florida Rose Society, which will be the Ninth Annual Session of that Society, and the Krome Memorial In-

stitute. The Krome Memorial Institute was organized last year and is a name given to that part of Horticultural Society program which is devoted exclusively to a discussion of Avocados, Mangos, Limes and other sub-tropical fruits, exclusive of the commonly grown varieties of citrus. The Institute was named in honor of the late Wm. J. Krome, who was a pioneer in commercializing these fruits.

The hosts of the Society this year will be the United States Department of Agriculture workers located in Orlando. Opportunity will be given the members to visit the research laboratories and acquaint themselves with the excellent work these men are doing for the benefit of horticulture in Florida.

The citizens of Orlando are planning on entertainment for the Society which, they say, will exceed that provided at Lake Wales. The program will be snappy and well worth while. Program announcements will be made soon and a large attendance is anticipated.

Health Value of Citrus Recognized

That the medical and dental professions are aware of the health values in citrus fruits is evidenced by daily requests from individual members of both professions throughout the United States for booklets, pamphlets and folders on citrus health values, according to Earl Lines, advertising Manager of the Florida Citrus Exchange.

"Every mail at this season of the year brings many requests for information on the health values, particularly in oranges, from all sections of the country. A dentist in Bronx, New York, — 'Unfortunately many patients have not as yet learned the dietary importance of oranges in every day life, and on that account it is my desire to acquaint them in every possible way with this fact — please send a quantity of your health booklets to hand to my patients.'

"Recent health experiments such as the one conducted at Moosehart

prove conclusively that the addition of orange juice to the daily diet aids growth and vitality and prevents the development of gingivitis and dental caries, according to printed reports of the physicians who conducted these experiments among several hundred children over a period of thre years."

The Florida Citrus Exchange supplies frequent and numerous releases on the values of oranges, grapefruit and tangerines for the information and use of institutions, schools, home economic editors and cooking school authorities, which are apparently appreciated, Mr. Lines stated, as shown by continued requests for these materials.

Board of Control Visits Agricultural Research Stations

Gainesville, Fla.—An inspection of branch stations of the Florida Agricultural Experiment Station system was a feature of the February meeting of the State Board of Control, February 10-13. The Citrus Experiment Station at Lake Alfred, the Everglades Experiment Station at Belle Glade, and the Sub-Tropical Experiment Station at Homestead were visited and inspected by the members of the control board, who also comprise the State Plant Board.

Members of the board expressed themselves as well pleased with the work of the branch stations and the status of buildings, land and equipment, when they had completed the inspection.

They were accompanied on the four-day trip by presidents of the

State's institutions of higher learning and by Dr. Wilmon Newell, director of the Agricultural Experiment Stations of the University of Florida College of Agriculture.

Members of the State Board of Control are Geo. H. Baldwin, Jacksonville, chairman; A. H. Blanding, Bartow, A. H. Wagg, West Palm Beach, Oliver J. Semmes, Pensacola, and Harry C. Duncan, Tavares. In addition, J. T. Diamon, Tallahassee, Tigert, President of the University of secretary of the board, Dr. John J. Florida, Dr. Edward Conradi, president of the State College for Women, Dr. C. J. Settles, president of the Florida School for the Deaf and Blind, and Dr. Newell accompanied the board members.

All of these branch stations for the study of problems of fruit growing, vegetable growing, and other agricultural subjects, have been established by the Florida Legislature since 1920, when the one at Lake Alfred came into being. The Everglades Station was officially established in 1923 and the Sub-tropical Station in 1930. All three have made excellent records in research on agricultural problems since their establishment.

FOR SALE

Lists of Florida Citrus Growers compiled from recent survey of groves, arranged by counties. Name, address, acreage and legal description.

Also list wealthy residents of

W. L. Lamar
P. O. Box 333

JACKSONVILLE, FLA.

J. F. AHERN

Consulting Engineer

Specializing In

Diesel, Electric and

Hydraulic Engineering

Hydraulic Engineering

Phone 7-4755 2365 Post St.

Jacksonville, Florida

THE CONCENTRATION
AND MOVEMENT OF NITRATE NITROGEN IN
FLORIDA CITRUS SOILS
(Continued from page 9)

trees it would appear desirable to provide them with sufficient moisture, nitrates and other nutrients during the winter and spring to allow a reserve to be stored up. This will tide them over the rainy season and probably result in a better quality of fruit than attempting to supply tree and crop needs through direct fertilizer applications in the summer and fall. The optimum range of nitrate nitrogen in Florida soils for maximum storage by the tree is not known. This will depend on the age of the tree, crop of fruit and moisture content of the soil. If trees under California conditions produce satisfactory crops with 2-10 parts per million of seem reasonable to assume that higher amounts would be needed in Florida where excessive leaching and insufficient moisture remove the nitrogen from tree use part of the year. The practice of aiding 8-12 parts per million of nitrate nitrogen in the zone of root concentration (4 foot depth) during the late winter and spring months, might be sufficient to provide tree needs and nitrogen storage in most soils. Since soil moisture often becomes a limiting factor in citrus production, it would appear from the results of this study that a grower could go a long ways toward improving tree conditions and fruit production by adding a few inches of water during the dry winter and spring months, and thus permit the trees to absorb the nitrogen as well as the other nutrients.

nitrate nitrogen in the soil it would seem reasonable to assume that higher amounts would be needed in Flor-

(Continued from page 21)
Another instance was where one of the larger shippers wrote me a very fine letter commending the Committee for its excellent work and giving assurances of his hearty support and cooperation. Just one week later, and after another Committee order went out he again wrote me. This time it was sulphuric epistle so hot that it sizzled, damning the Committee individually and as a whole. We had stepped on his toes with a restriction that at the moment interfered with his own operations.

In fairness it should be said that not all the shippers are unwilling to submit to regulations. Many of the larger shippers are working wholeheartedly with the Committee, but in

When You Visit TAMPA We Invite You to Live at

Hotell Hilsboro

Largest Hotel — Largest Rooms — Largest Windows Fire-Proof — Steam Heat

NEAREST TO EVERYTHING

"TOP O' THE TOWN" Dining Room

\$2.00 to \$4.00 DOUBLE \$3.00 to \$5.00 Coffee Shop Cafeteria

QUALITY FOOD AT REASONABLE PRICES

C. J. JACKSON, Manager.

5

a

d

p.

k

e.

50

n-

e-

r-

at

to

A-

these refreshing cases it will be found that the Shipper is also a large grower, and so can see from the grower standpoint.

Many of the shippers and almost none of the large army of middlemen now supported by the industry, have a single dollar invested in grove property. They have no interest in the grower's problems. They are concerned only in what they can, by hook or crook, get out of the business for themselves.

It is from this quarter that the most bitter opposition comes and it will continue to come.

Orderly marketing will go far toward saving our industry, but it is not enough. We must do more, if the grower is going to fully come into his own.

Not only must our fruit be properly distributed but it must be of a quality that will satisfy the consumer. The day is past—in fact it never existed—when we can clutter up the markets with off-grade fruit and expect to get a price for it that will pay even the cost of handling.

Quality production is strictly up to the grower and he must work to that end if he is to prosper.

No police power of Uncle Sam or of the Control Committee can develop a demand for poor, low grade fruit.

Another thing that must be corrected is starting the season each year by sending to market immature fruit that we would not think of using ourselves. No surer way could be devised to create unpopularity for our fruit with the consumer. How much, or how little, our Committee can do to correct this evil we do not yet know.

Whatever is done must be supported by a new green fruit law. The present law is, as we all know, entirely inadequate.

Governor Sholtz has already given assurance of active support for any needed legislation.

Also the grower must learn that to insure broader distribution and to increase demand he must advertise his product.

Competitive fruits and fruit products are today being advertised as never before, and if citrus is to continue its leadership we must get in line with some real publicity.

It is not too much to say that an advertising fund created from an assessment of from 3 to 5 cents a box, will bring to the grower at least an added 25 cents a box for his fruit. The small experiments already made in the advertising field fully proves

this.

The Control Committee hopes, through a change in the present Agreement, to be able to bring citrus into the field of advertised products by another season. If it did nothing more than that, its existence would be justified.

Another thing—and this is outside the pale of the Control Committee the grower must make use of his fruit, unfit for market, in the way of by-products.

Research work is now being done, and experiments conducted by, not only the Government, but by private enterprise as well. A chemist in our own organization is now doing some very interesting work in this direction, particularly with reference to wines, brandies, and cordials.

It is not too much to say that we already know that dry wines, comparable in every way with the German Rhine wines can profitably be produced from grapefruit.

This means a light, palatable table wine, moderate in cost, that would find a broad market in large quantities.

The State prohibition law will, of course, first have to be repealed, but this should not be difficult, when we consider that this would mean using

APPLICATION

Colored by Ethylene— Fruit brings "top prices"

In the coloring of fruit, science has found a method that costs little, and pays big. It's the **Ethylene** Gas coloring method.

Developed in cooperation with U. S. Department of Agriculture, the **Ethylene** Gas method is used by leading Fruit Exchanges, Associations and others, especially for Citrus fruits. It colors mature fruit in ½ the time required with other methods . . . moreover **Ethylene** colors fruit evenly.

And, better yet, because fruit can be colored as wanted, the use of **Ethylene** Gas means . . . your fruit goes to market when the price is at the top. Cost? Only a few cents a full carload of fruit.

Learn about Ethylene fruit coloring. Write for the FREE booklet we offer . . . talk, too, with your Exchange Officials.

Sell tomatoes locally?

If so, pick them green-ripe and color them with Ethylene. You get them to market 2 to 4 weeks earlier than waiting for field ripening. Defeat field mice, wire worms, sun scald, cracking, wind and hail damage.

FREE Send for your copy today

This 20-page booklet, issued by the largest suppliers of Ethylene to the Citrus Industry, tells the story of Ethylene Gasfor coloring mature fruit and vegetables ...explains how it is used... by Fruit Exchanges and others. Write Carbide and Carbon Chemicals Gerperation, Deak C, 30 East 42nd St., New York.

Unit of Union Carbide Corporation



SUMMER

Four thousand acres of Florida citrus were fertilized with Granular 'Aero' Cyanamid in 1933

- 1. It contains 27% ammonia and 70% hydrated lime
- 2. Its nitrogen is not leached from the soil by rains
- 3. It feeds the tree evenly throughout the season
- 4. Its lime sweetens the soil
- 5. It increases bacterial activity
- 6. Granular 'Aero' Cyanamid is easy to handle and apply



GRANULAR 'AERO' CYANAMID being non-leaching, is espe-

cially adapted for application during the summer rainy season.

A leaflet, giving details as to who use Granular 'Aero' Cyanamid on their citrus groves, and how they use it, sent on request.

AMERICAN CYANAMID COMPANY
Manufacturers of 'Aero' Cyanamid and 'Atomo-Phos'
1001 EDGEWATER DRIVE ORLANDO, FLORIDA

'AERO' CYANAMID is NITROGEN plus LIME

all of our surplus grapefruit which otherwise would not go to market.

The history of the Control Committee is brief—it has been in actual existence but little over two months. Unfortunately, in spite of much effort and much time spent in Washington by several members of the present Control Committee, and a great many others interested in the industry, we were unable to get the Committee in operation until the present shipping season was well advanced.

The Committee had not been long in operation, however, before the market was advanced from 60c to 75c a box.

A more recent service of the Control Committee was making it possible for the 3rd grade fruit to be purchased by the Government for relief work.

Without the Control Committee to handle all of the details of marketing the large amount of fruit involved, it would have been almost an impossibility for the Government to have handled the matter alone.

Threats and rumblings had been heard from the start from certain shipping interests which opposed regulations and these came to a head on January 8th, when injunction proceedings were brought in Federal Court by certain shippers and a Restraining Order secured. The issue was tried in the lower court and the Restraining Order declared permanent. The Control Committee was out of business. Prices of fruit immediately dropped.

The case was appealed to the Federal Court of Appeals as quickly as possible, and the Restraining Order was set aside, until March 21st when the Constitutionality of the Act creating the Control Committee will be tested.

I can only say that we feel entirely confident that the case will be won in the higher courts.

That accomplished, the Control Committee will, from the brief experience gained, and with its machinery fully set up and in running order, be prepared to function adequately next season.

Many adjustments must be made by the industry at large, to meet the requirements set up in the Agreement.

Everybody knows there are too many shippers, too many packing houses, and too many middlemen, in the industry. Overlapping and oversupply of these facilities bring added costs to the grower, for in the end the grower must foot every bill incurred in producing and handling his crop.

Freight rates are altogether too high and wholly out of line with costs of production and selling. They must come down.

Out of all this welter comes opposition. Opposition to anything and everything which threatens in anyway to disturb the present extravagant set-up, and this opposition will continue until our house is put in order.

In the end, every legitimate and established shipper, and every needed middleman, and every needed packing house, will find their proper places in the new picture. The rest must shift for themselves under the old law of supply and demand.

This done, what will we have?

FIRST of all—a fair and adequate return to the grower for quality fruit

SECOND—a fair and adequate return to legitimate shippers and to needed packing houses.

THIRD—and by no means last, a living wage to every man and woman who supplies the labor required to produce and prepare the fruit for market.

Given a fair chance, these things the Control Committee can be instrumental in bringing about another season.

It will not be easy. It is a stupendous task to bring order out of such appalling chaos, but it can and must be done.

CLASSIFIED

Advertisments

The rate for advertisements of this nature is only five cents per word for each insertion. You may count the number of words you have, multiply it by five, and you will have the cost of the advertisement for one insertion. Multiply this by the total number of insertions desired and you will have the total cost. This rate is so low that we cannot charge classified accounts, and would, therefore, appreciate a remittance with order. No advertisement accepted for less than 50 cents.

PUREBRED PULLETS FOR SALE—White Leghorns and Anconas ready to ship. Barred Rocks and R. I. Reds shortly. Several hundred yearling White Leghorn hens now laying 70%. Write or wire for prices. C. A. Norman. Dr. 1440. Knozville. Tenn.

DUSTER — Ningarn, Air-Cooled engine Steel truck-mounted. Nearly new. Half price. Samuel Kidder. Monticello Fla.

CROTALARIA STRIATA—Fresh crop in limited quantity. Write for prices. Igou-Kauffman Cretalaria Co., Eustis, Fla.

PACKING HOUSE FOR SALE—Completely equipped and ready to go. Two car capacity, \$4500 terms. R. W. Stults, Pine Castle, Fla. WANTED—To hear from owner having good farm for sale. Cash price, particulars, John Black, Chippewa Falls, Wisconsin.

LAREDO SOY BEANS, considered free from nematode, excellent for hay and soil improvement. Write the Baldwin County Seed Growers Association, Loxley, Alabama, for prices.

FANCY ABAKKA pineapple plants. R. A. Saeger. Ankona, Florida

FOR SALE—Selected budwood and trees of Perrine lemon, Tahiti lime, new varieties tangeloes and other citrus. Ward's Nursery, Avon Park, Fla.

DETAILED SOIL Analysis, Interpretations. \$2.50. Soil Laboratory, Frostproof, Florida.

SCENIC HIGHWAY NURSERIES has a large stock of early and late grapefruit and oranges. One, two and three year buds. This nursery has been operated since 1883 by G. H. Gibbons, Waverly, Fla.

SEND no money. C. O. D. Cabbage, Onion and Collard plants. All varieties 500—60c; 1,000—95c; 5,000 and over 75c per 1,000. Standard Plant Co., Tifton, Ga.

CLEOPATRA MANDARIN Seedlings 12in. to 18 in., \$10.00 per 1,000. Sour Orange lineout size, \$8.00 per 1,000. Grand Island Nurseries, Eustis, Florida.

NEW COMMERCIAL lemon for Florids, the Perrine; proven. All residents need yard trees, keeping Florida money at home. Booking orders for budded stock for Winter delivery. DeSoto Nurseries, DeSoto City, Fla.

WANTED-To hear from owner of land for sale. O. Hawley, Baldwin, Wis.

SATSUMA BUDWOOD from Bearing Trees. Hills Fruit Farm, Panama City, Fla.

SEED—Rough lemon, sour orange, cleopatra. New crop from type true parent trees. Also thrifty seedlings. DeSoto Nurseries, De Soto City, Florida.

(TOBACCO)

FINEST HAND Picked Mellow Aged Long Red Leaf Chewing or Mild Delightful Cigarette or Pipe Smoking 5 pounds either only \$1.00. Perfect satisfaction strictly guaranteed. Pay when received. Morris Bros.. Fulton. Kentucky

BUDDED trees new Florida commercial lemon, proven, thin skinned, juicy, scab immune. Also rough lemon, sour orange and Cleopatra seed and liningost seedlings. DeSoto Nurseries. DeSoto City, Fla.

SEEDS—ROUGH LEMON, SOUR ORANGE, CLEOPATRA. Pure, fresh, good germination. Also seedlings lineout size. De Soto Nurseries. DeSoto City, Fla.

RAISE PIGEONS—Profit and pleasure. Illustrated descriptive catalogue postage six cents. Vrana Farms Sox 314a. Clayton. Missouri

CROTALARIA SPECTABILIS—Seed for sale.

New crop, well cured, bright and clean.
Price 25c per pound in 100 pound lost
and over, 30c per pound in less quantities, f. o. b. Hastings, Bunnell, Lowell
and San Antonio, Florida. F. M. LEONARD
& COMPANY, Hastings, Florida.

Shipping Departments

For Sale—One used "Marsh" Stencil Cutting Machine; cuts half-inch letters. Also have ink pot, brush and liberal supply of blank stencils. Machine guaranteed in best of condition and to operate in every way comparable with a new machine.

Price, complete with accessories as listed, f.o.b. Tampa,

THE DURO CO. 1219 Florida Ave., Tampa, Fla. Citro Control Committee, Florida

Three

Strauss Defends Action By Control Committee

Too much fruit has not been prorated to the auction markets by the Florida Control Committee this season and the control set-up has not stimulated shipments, as some critics of the Citrus marketing agreement have charged, O. G. Strauss, secretary of the committee, declared in a statement this week in which he said that "these so-called critics are unfamiliar with the facts."

Strauss demonstrated that the amount of citrus fruit which has been prorated this year has been considerably less than unloads at these markets for coresponding periods last season.

Speaking of oranges, he said, "In March last year 1,398 cars of oranges were unloaded in New York. This was an average of 325 cars per week. However, allotments for March this spring, made by the control committee, averaged only 267 cars per week—or 58 cars less per week," the secretary asserted.

The committee's largest allotment for any weekly period to Philadelphia was 110 cars, while last year the average amount of fruit shipped there was 122 cars per week.

"New York's allotments for April this spring were 295 cars the first week, 275 cars the second and 225 cars for the third week, starting Thursday, April 12. Last year the average weekly unloads in New York for April were 288 cars. At New York in May last year unloads averaged 362 cars per week which is far in excess of anything the Florida Control Committee has ever had in mind this season.

"Philadelphia was allotted 110 cars for the first week in April, 100 cars the second and the present allotment is only 80 cars. This compares with 112—car average for April last year in Philadelphia.

"The May average for Philadelphia last year was 136 cars a week," the secretary further declared.

Turning to grapefruit, Secretary Strauss asserted that at no time this season has the allotment for New York exceeded 120 cars per week, although last year New York's grapefruit unloads in March averaged 180 cars weekly. The present weekly allotment, he said, is only 100 cars.

Strauss compared the present New York average—around 100 cars of grapefruit a week—with unloads last April in New York which averaged 156 cars a week and with May when the average weekly unloads climbed up to 187 cars.

Philadelphia's average weekly allotment on grapefruit this season has averaged less than 35 cars per week and the present allotment is only 30 cars, yet this compares with unloads last year of 52 cars a week in March, 52 cars weekly in April and 47 cars per week in May, Secretary Strauss declared.

In concluding his statement he declared that "it is very evident from these figures that a material reduction in shipments to the key markets has been ordered by the Control Committee, particularly in view of the fact that the economic conditions this season are better than they were last year and therefore the markets are in better position to consume a larger supply—yet the prorations made by the Control Committee are less."

The allotments to the ten auction markets for the week of April 12-18 as approved Monday, were the same figures recommended by Secretary O. G. Strauss of the control committee after contacting receivers in the north regarding market conditions. The allotments were reduced over last week, for 130 less cars of oranges and 46 cars of grapefruit were authorized for the seven day period. Allotments are as follows:

225	cars	100	cars
80	curs	30	cars
25	cars	10	cars
60	cars	25	cars
25	cars	10	cars
20	cars	15	cars
25	cars	15	cars
25	cars	20	cars
40	cars	35	cars
20	cars	10	CATS
545	cars	270	cars
	80 25 60 25 20 25 25 40	80 curs 25 cars 60 cars 25 cars 20 cars 25 cars 40 cars 20 cars	80 curs 30 25 cars 10 60 cars 25 25 cars 10 20 cars 15 25 cars 20 40 cars 35 20 cars 10

The motion to adopt the Strauss figures was offered by C. C. Commander, who declared that "responsibility of violations of these prorates rests with the federal government."

L. C. Edwards, Tampa, favored reducing the allotments on oranges 50 per cent, but he was voted down.

Mr. Edwards has led a move at recent meetings to reduce movement of fruit considerably. Mr. Commander declared that if reductions are made, California will "dump thousands of boxes."

Discussions over the proper amount of fruit for shipment occupied more than an hour.

It was found to be impossible to adopt a general volume prorate (a limit set on the total amount of fruit leaving Florida). Attorney Francis P. Whitehair telephoned AAA officials at Washington during the afternoon to see whether this system could be adopted to deal with marketing problems. Until certain statistical data is amassed, this cannot be done, he was advised.

A move for a "shipping holiday" also lost out in the committee. Harry L. Askew, Lakeland offered a motion calling for a four-day shipping holiday, but he was outvoted.

Other business transacted by the committee included approving a long list of individual allotments to the shippers of Florida for the ten auction markets.

A committee of three—C. C. Commander, C. A. Stewart and Sen. A. W. Young—was appointed to look into the matter of certain bills presented which it was declared were due for work done by several citrus men in organizing the control set-up last fall. Those were the days which preceded and followed the famous "Lakeland meeting" at which the citrus industry voted for a marketing agreement.

Another motion was passed which ends assessments on one-cent-a-box on shipments of fruit for Europe. Only fruit shipped to Canada and in the U. S. will be taxed hereafter.

Upon motion of W. H. Mouser the committee voted to refund payment which shippers made to the committee from Feb. 1-10.

Prevention of plant diseases and pests has been found more economical than control or eradication in much of the experimental work at the State College of Agriculture. The outright expense frequently is less, while the losses avoided by the preventive measures nearly always give them a distinct advantage over the other methods.

Superior Selling Service for Producers' Associations

Producers have in common their problems of production. When their products have been gathered and prepared for market the making of actual sales best can be performed by an organization which makes selling its specialty.

For a quarter of a century American Fruit Growers Inc., and its predecessor in business, has handled sales for a large Ohio farmers' cooperative association without break in the continuity of pleasant relations.

Over a long period of years American Fruit Growers Inc., has represented the Northwestern Fruit Exchange and the Skookum Packers Association for the sale in the markets of the boxed apples best known in both the United States and abroad.

These are two of numerous examples which show that AFG Selling Service is exceptionally able to serve satisfactorily cooperative or other groups of producers which pack their own products for market.

To such groups, or cooperative associations, American Fruit Growers Inc., is prepared to submit proposals both unusually interesting and unusually advantageous.

American Fruit Growers Inc.

Florida Division Orlando, Florida

